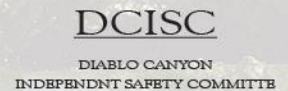
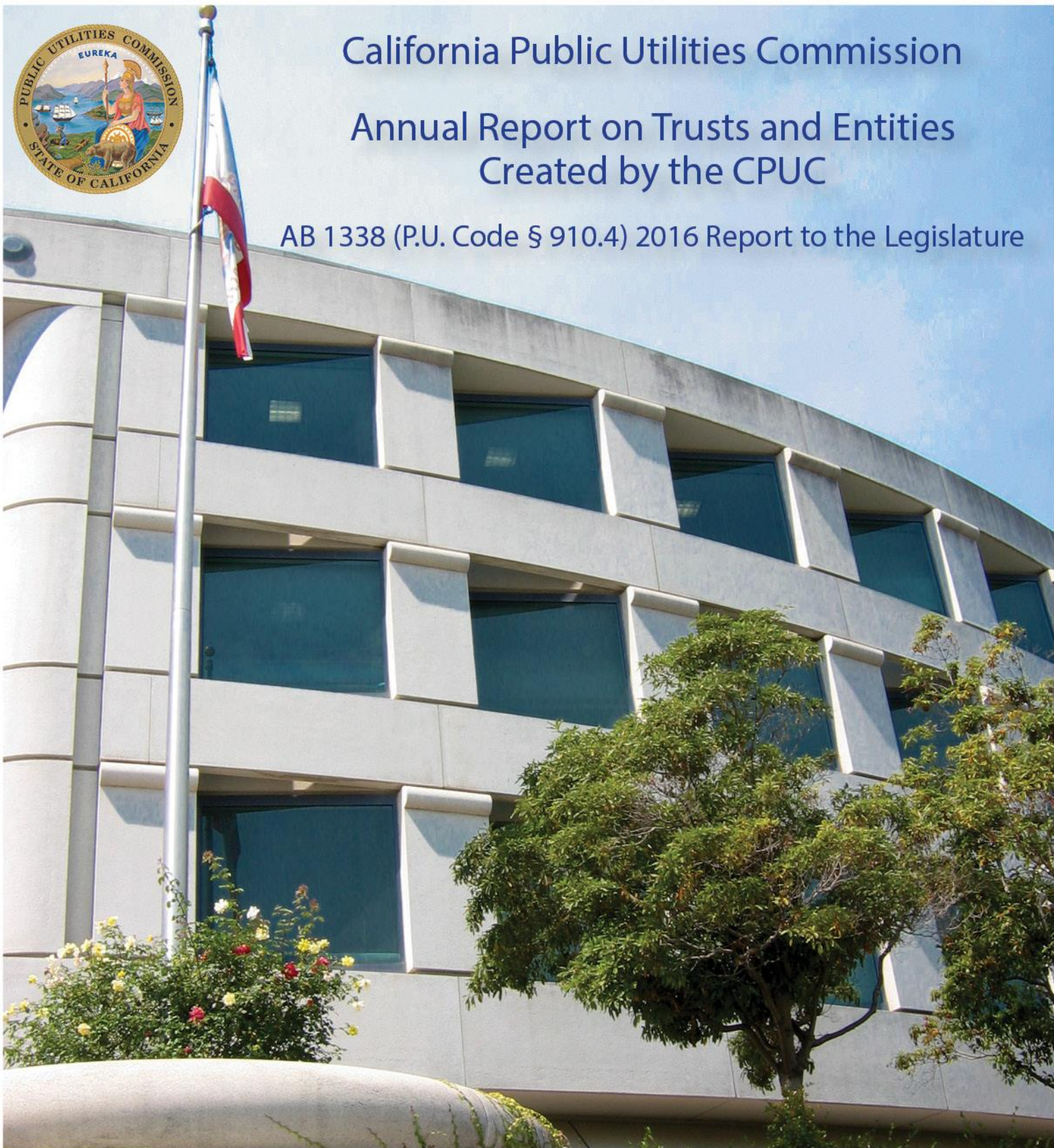




# California Public Utilities Commission

## Annual Report on Trusts and Entities Created by the CPUC

AB 1338 (P.U. Code § 910.4) 2016 Report to the Legislature



January 10, 2017



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## **ASSEMBLY BILL 1338 (2008)**

This legislative report is submitted by the California Public Utilities Commission (CPUC) to the Legislature pursuant to AB 1338 passed in September 2008. The bill included a rider creating new Section 326.5 of the California Public Utilities Code. Among other things, this law requires the California Public Utilities Commission (CPUC) to report to the Legislature certain information concerning entities or programs created by order of the CPUC. On January 1, 2016, Section 326.5 of the Public Utilities Code was amended and renumbered to P.U. Code 910.4.<sup>1</sup>

### **910.4.**

By January 10 of each year, the commission shall report to the Joint Legislative Budget Committee and appropriate fiscal and policy committees of the Legislature, on all sources and amounts of funding and actual and proposed expenditures, both in the two prior fiscal years and for the proposed fiscal year, including any costs to ratepayers, related to both of the following:

(a) Entities or programs established by the commission by order, decision, motion, settlement, or other action, including, but not limited to, the California Clean Energy Fund, the California Emerging Technology Fund, and the Pacific Forest and Watershed Lands Stewardship Council. The report shall contain descriptions of relevant issues, including, but not limited to, all of the following:

- (1) Any governance structure established for an entity or program.
- (2) Any staff or employees hired by or for the entity or program and their salaries and expenses.
- (3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses.
- (4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the commission entered into the contract.
- (5) The public process and oversight governing the entity or program's activities.

(b) Entities or programs established by the commission, other than those expressly authorized by statute, under the following sections:

- (1) Section 379.6.
- (2) Section 399.8.
- (3) Section 739.1.
- (4) Section 2790.
- (5) Section 2851.

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<sup>1</sup> SB 697 (Hertzberg, 2015); SB 1222 (Hertzberg, 2016).

## **I. ENTITIES OR PROGRAMS ESTABLISHED BY THE COMMISSION (PUBLIC UTILITIES CODE SECTION 910.4 (a))**

### **A. THE PACIFIC FOREST AND WATERSHED LANDS STEWARDSHIP COUNCIL**

#### **BACKGROUND**

The Pacific Forest and Watershed Lands Stewardship Council (Stewardship Council) was formed as a result of the California Public Utilities Commission (CPUC) Decision 03-12-035 dated December 18, 2003: *“Opinion Modifying the Proposed Settlement Agreement of Pacific Gas & Electric Company, PG&E Corporation and the Commission Staff, and Approving the Modified Settlement Agreement”*. Paragraph 6 of Section VI, Subsection C specified that a total of \$100 million would be provided to the Stewardship Council for The Land Conservation Commitment and the Environmental Opportunity For Urban Youth. Paragraph 6 further stipulated that funding would be paid over 10 years, to be recovered in retail rates. The Stewardship Council does not receive any additional sources of funding at this time.

The Stewardship Council's mission is to protect and enhance watershed lands and uses, and invest in efforts to improve the lives of young Californians through connections with the outdoors. The Stewardship Council has two goals: (1) to ensure that over 140,000 acres of California's pristine watershed lands are conserved for the public good through the Land Conservation Program, and (2) to invest in outdoor programs that serve young people residing in the PG&E service area through the Youth Investment Program.

The Stewardship Council Board of Directors is comprised of appointees from state and federal agencies, including the CPUC, water districts, tribal and rural interests, forest and farm industry groups, conservation organizations, and PG&E. All decisions of the Board of Directors are made by consensus.

#### **PARTIAL LIST OF LAND CONSERVATION PROGRAM ACCOMPLISHMENTS**

- ◆ Following a comprehensive public outreach effort, the Stewardship Council Board of Directors adopted Volumes I and II of the Land Conservation Plan (LCP) on November 28, 2007. The LCP is a comprehensive framework to guide the Stewardship Council's conservation work.
  
- ◆ The Stewardship Council Board of Directors has selected nearly 20 entities as prospective recipients of fee title donations of PG&E Watershed Lands. Fee title conveyance transactions are moving forward on approximately 35,000 acres. The future landowners are federal, state, and local public agencies, nonprofit conservation organizations, and Native American entities. To date, the Board of Directors has selected 12 qualified organizations to hold conservation easements that will protect the Beneficial Public Values (BPVs) of PG&E's Watershed Lands.

- ◆ As of November 1, 2016, the Board has approved Land Conservation and Conveyance Plans (“LCCPs”) for 40 fee donations and/or conservation easement or conservation covenant transactions. These plans describe how the proposed transactions satisfy the requirements of the Settlement Agreement and Stipulation. After the Board approves a LCCP, PG&E then seeks regulatory approval of the transaction from the California Public Utilities Commission, and from the Federal Energy Regulatory Commission, as applicable.
  
- ◆ As of November 1, 2016, fee title of six properties has been conveyed following approval of the transaction by the California Public Utilities Commission:
  - ◆ 240 acres of lands at Kennedy Meadows, located in Tuolumne County, were donated to the County of Tuolumne on November 20, 2013. Concurrently, a conservation easement being held by the Mother Lode Land Trust was recorded that will ensure the beneficial public values of those lands are protected in perpetuity.
  - ◆ 151 acres of lands in the Deer Creek planning unit, located in Tehama County, were donated to the United States Forest Service on October 9, 2014, along with a conservation covenant that is being held by the Sierra Nevada Conservancy.
  - ◆ 41 acres at the Narrows planning unit, located in Nevada County, were donated to the University of California for management by its Sierra Foothill Research and Extension Center. The conservation easement on that property is held by the Bear Yuba Land Trust.
  - ◆ 371 acres of lands at the Lower Bear Area planning unit, located in El Dorado County, were donated to the United States Forest Service on December 10, 2015, along with a conservation covenant that is being held by the Sierra Nevada Conservancy.
  - ◆ 167 acres of lands at the Wishon Reservoir planning unit, located in Fresno County, were donated to the United States Forest Service on July 12, 2016, along with a conservation covenant that is being held by the Sierra Nevada Conservancy.
  - ◆ 16 acres of lands at the Lower Drum planning unit, located in Placer County, were donated to the Auburn Area Recreation and Park District on June 10, 2016. Concurrently, a conservation easement being held by the Place Land Trust was recorded.

In addition, eight conservation easements have been recorded on lands retained by PG&E.

- ◆ In 2012, the Stewardship Council launched its enhancement program, which will ultimately result in more than \$20 million in grants being awarded to projects that enhance the BPVs of the Watershed Lands and promote partnerships between the landowner, the conservation easement holder, local communities, youth, and other stakeholders. To date, several grants have been awarded for planning and feasibility studies, biological surveys, and resource protection projects. For example, the Stewardship Council awarded approximately \$1.4 million to a project being implemented by [Cal Trout](#) and the [Pit River Tribe](#) to restore 1.5 miles of in-stream wild

trout habitat and native vegetation along Hat Creek in Shasta County. Grant funds were used to build new trails, a pedestrian bridge, and scenic picnic area; enhance fishing opportunities; and protect several historic sites with new fencing, landscaping, and signage. Pit River Tribe youth and tribal members are helping to implement this project. The Stewardship Council awarded \$550,000 to the Spring Rivers Foundation to restore a meadow that will support the Shasta crayfish, an endangered species. The project is restoring and re-watering approximately 650 feet of channel in Rock Creek in Shasta County to create habitat for the crayfish, which will be relocated from nearby existing habitat. The project is providing fieldwork experience to youth and young adults as part of high school and university curriculum.

- ◆ The Stewardship Council's Land Conservation Program activities have also resulted in:
  - a) The creation of a collaborative partnership among the Maidu Summit Consortium, the California Department of Fish and Wildlife, and the Feather River Land Trust to preserve and enhance the beneficial public values at the Humbug Valley planning unit in the Upper Feather River Watershed.
  - b) A plan to significantly expand the state's research and demonstration forest systems in the Sierra and Cascade ranges through the donation of 17,000 acres of forested watershed lands to the California Department of Forestry and Fire Protection (CAL FIRE) and the University of California Center for Forestry.
  - c) The development of a model conservation easement for use on watershed lands being actively managed and operated for utility purposes.

## **YOUTH INVESTMENT PROGRAM ACCOMPLISHMENTS**

Between 2006 and 2011, the Stewardship Council directly administered a grant making program that awarded 268 grants resulting in over \$12.2 million in funding to connect over 260,000 underserved youth living in the PG&E service area with the outdoors. These grant awards included over \$1 million in Catalyst grants, which were designed to help support grassroots organizations using innovative methods to connect youth with the outdoors within or near their communities; and, \$4.8 million in Infrastructure grants, which provided much needed funds to develop and renovate urban parks.

Between 2010 and 2013, the Stewardship Council provided financial and in-kind support to establish the Foundation for Youth Investment (FYI), a nonprofit organization created by the Stewardship Council to continue as a funding source for youth programs focusing on outdoor education and experiences. In August 2013, the Stewardship Council awarded \$10.7 million to FYI, effectively transferring its remaining youth program net assets to FYI. FYI, now named "Youth Outside" is to use those grant funds to carry out the purpose of the Stewardship Council's youth investment program. FYI is led by an independent board of directors. Under

the terms of a Major Grant Agreement with FYI, the Stewardship Council has the right to appoint one person to serve on FYI's board of directors until all the grant funding provided by the Stewardship Council has been expended. At the request of CPUC legal staff, CPUC was named as a third party beneficiary to the Major Grant Agreement. Upon the Stewardship Council's dissolution the CPUC shall have the right to succeed to the Stewardship Council's rights but not obligations under the Major Grant Agreement.

Between 2012 and 2016, using Stewardship Council funding, Youth Outside directly awarded more than \$4 million in program grants to connect underserved youth in the PG&E service area to the outdoors. In addition, Youth Outside awarded a \$500,000 infrastructure grant to the Trust for Public Land in 2016 to help complete the restoration of Hilltop Park in the Bayview neighborhood of San Francisco. Through grants from the Stewardship Council, Youth Outside took a leadership role in developing and funding the following strategic initiatives:

- ◆ The Outdoor Educators Institute, a program designed to recruit and train diverse young adults from urban areas to become outdoor instructors.
- ◆ Rising Leaders Fellowship, a program that supports the professional development of diverse, rising leaders who currently hold an entry to mid-level positions within an outdoor programming or outdoor education organization.
- ◆ The Outdoor Transportation Fund, which provides transportation assistance to school teachers and school-based programs to enable youth to attend field trips in the outdoors. Since its inception, the fund has allowed over 15,000 low-income students to participate in field trips.
- ◆ A series of regional conventions of youth program providers to develop standards and practices for delivering culturally relevant programming to underserved youth.
- ◆ The Stewardship Council's environmental enhancement program has also provided funding to involve youth in the implementation, maintenance, and monitoring of enhancement projects on PG&E Watershed Lands.

## **ANNUAL REPORT**

The Stewardship Council has established an independent Audit Committee which oversees a full financial audit of the organization's financial statements and internal controls processes. This annual audit is available to the public via the Stewardship Council's website, as is the organization's IRS form 990: Return of Private Foundation. These reports can be found at: [http://www.stewardshipcouncil.org/public\\_information/financial\\_statements.htm](http://www.stewardshipcouncil.org/public_information/financial_statements.htm)



In addition to supplying the most recently available audit report and tax return, this report outlines the additional information required by the Public Utilities Code Section 910.4.

**(1) Any governance structure established for an entity or program.**

a. Articles of Incorporation

[http://www.stewardshipcouncil.org/documents/background%20documents/Articles%20of%20Incorporation\\_Amended%204.30.14.pdf](http://www.stewardshipcouncil.org/documents/background%20documents/Articles%20of%20Incorporation_Amended%204.30.14.pdf)

b. Bylaws

[http://www.stewardshipcouncil.org/documents/background%20documents/Corporate%20Bylaws\\_Amended%204.30.14.pdf](http://www.stewardshipcouncil.org/documents/background%20documents/Corporate%20Bylaws_Amended%204.30.14.pdf)

c. Settlement Agreement

<http://www.stewardshipcouncil.org/documents/background%20documents/Settlement%20Agreement.pdf>

d. Stipulation Agreement

<http://www.stewardshipcouncil.org/documents/background%20documents/Stipulation%20Signed.pdf>

e. Policies and Procedures

Supplied as a separate document as Addendum 1a (available on CD by request).

**(2) Any staff or employees hired by or for the entity or program and their salaries and expenses.**

a. Schedule of Employees and Compensation:

A summary of staff salaries and benefits are provided in **Table 1**, a more detailed breakdown of salaries and benefits for the top five highest paid employees is given in **Appendix 1.1**.

**Table 1** - General breakdown of active staff costs for 8 years to Dec 31, 2015, and 10 months ended October 31, 2016:

Year	Gross Pay	Benefits	401k	Total
2008	\$1,104,093	\$197,132	\$28,382	\$1,329,607
2009	\$1,341,280	\$250,658	\$39,568	\$1,631,506
2010	\$1,657,798	\$314,535	\$48,442	\$2,020,775
2011	\$1,590,718	\$304,839	\$47,210	\$1,942,767
2012	\$1,535,781	\$310,901	\$46,193	\$1,892,875
2013	\$1,171,951	\$231,036	\$42,868	\$1,445,855
2014	\$1,114,727	\$220,195	\$41,682	\$1,376,604
2015	\$1,057,086	\$205,453	\$39,244	\$1,301,783
2016 (YTD)	\$ 661,316	\$139,557	\$23,226	\$ 824,099

**(3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses.**

No State staff is currently or ever has been loaned to this organization.

**(4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the California Public Utilities Commission (CPUC) entered into the contract.**

a. Under the Settlement Agreement, Section 17(c), PG&E is obligated to fund the Stewardship Council annually over a ten year period and is authorized by the CPUC to recover these payments in rates. PG&E made its tenth and final installment payment to the Stewardship Council in January 2013. However, the CPUC is not a party to any of the contracts entered into by the Stewardship Council, except that it is a third party beneficiary to the Major Grant Agreement that the Stewardship Council entered into with the Foundation for Youth Investment in August 2013. When the Stewardship Council dissolves after it finishes its land conservation program work, the CPUC will have the right to succeed to the Stewardship Council's rights, but not its obligations, under the Major Grant Agreement.

b. Schedule of professional fees

See **Appendix 1.2.**

**(5) The public process and oversight governing the entity or program's activities.**

a. The Stipulation Agreement provides that:

1. "The meetings of the Governing Board [of the Stewardship Council], including meeting minutes, will be public... The Stewardship Council will publish notice of its meetings in newspapers of general circulation in the counties where affected parcels are located and will maintain a public web site... Before making decisions regarding the disposition of any individual parcel, the Stewardship Council will provide notice to the Board of Supervisors of the affected county, each affected city, town, and water supply entity, each affected Tribe and/or co- licensee, and each landowner located within one mile of the exterior boundary of the parcel, by mail or other effective manner." (Section 11(c))

2. "The Governing Board will make each decision by consensus" (Section 11(a) "Each member of the Governing Board will report to, and back from, the entity he or she represents before the Governing Board takes any programmatic action . . . in order to ensure that consensus represents the views of that entity." (Section 11(b))

3. "The Stewardship Council will provide semi-annual progress reports to the Commission... Each such report will state (1) actual expenditures and progress achieved towards the stated purpose of the Land Conservation Commitment; (2) unresolved disputes within the Governing Board; and (3) anticipated expenditures and actions during the next reporting period." (Section 14)

b. The Stewardship Council's corporate bylaws provide as follows:

#### Section 11. Public Notice of Meetings.

1. All meetings of the Board, including meeting minutes, shall be public; provided, however, that the Board shall have the authority to undertake a closed meeting in appropriate circumstances. The Board shall publish notice of its meetings in newspapers of general circulation in the affected counties within a reasonable time prior to any meeting and shall maintain a public web site that provides notices of its meetings and copies of all meeting minutes. Upon request, all information available on the web site shall be made available in hard copy to members of the public at cost.

2. Before the Board makes any decision regarding any individual parcel of land, the Board shall provide notice to the Board of Supervisors of the affected county, each affected city, town and water supply entity, each affected tribe and/or co-licensee and each landowner located within one mile of the exterior boundary of the parcel, by mail or other effective manner within a reasonable time prior to the meeting at which the Board will make the decision regarding that land.

c. The board-adopted Policies and Procedures include the following: **Public Noticing**  
The Stewardship Council is required to "publish notice of its meetings in newspapers of general circulation in the counties where affected parcels are located..." It is also required by its Bylaws to "publish notice of its meetings in newspapers of general circulation in the

affected counties within a reasonable time prior to any meeting...” Staff will be responsible for meeting the letter and spirit of these requirements through an inclusive and comprehensive public outreach effort.

### **Stewardship Council 2016 Public Outreach Activities, Targeted Media Outreach and Noticing**

1. The Stewardship Council sends e-mails to the stakeholders in its database regarding Land Conservation program updates and information, and announcements for public Stewardship Council board meetings. As of November 1, 2016, the Stewardship Council database included 13,251 individuals and 5,147 organizations (federal, state and local agencies, nonprofits, schools, tribal entities, foundations and for-profit businesses).
2. The Stewardship Council mails notifications to neighboring property owners, the Board of Supervisors of the affected county, each affected city, town and water supply entity, and each affected tribe regarding draft Land Conversation and Conveyance Plans (LCCPs) for subject parcels of PG&E Watershed Lands. The notification explains how stakeholders can submit public comments on the draft LCCP. The Stewardship Council also disseminates e-mail notices to stakeholders in its database requesting public comment on the draft LCCPs.
3. The Stewardship Council sends news releases announcing public board meetings to a media database, which includes approximately 1,000 media outlet representatives.
4. The Stewardship Council pays for legal notices to be printed in local papers, noticing all public board meetings. Notices are printed in newspapers serving populations that are located (a) near the place of each board meeting, and (b) in the geographical areas corresponding to the Watershed Lands that are the subject of a recommendation for the selection of a fee donee or conservation easement holder or a proposed action approving a Land Conservation and Conveyance Plan.
5. The Stewardship Council's 2015 annual report was posted to the Council's website, and its availability announced via an email to all stakeholders in our database.

## B. THE CALIFORNIA CLEAN ENERGY FUND

### BACKGROUND

The California Clean Energy Fund (CalCEF) is an independent 501(c)(4) non-profit corporation, doing business as CalCEF Ventures, that was established via the bankruptcy settlement between Pacific Gas and Electric Company (PG&E) and the California Public Utilities Commission (CPUC) with CPUC Decision 03-12-035 in Investigation 02-04-026. The \$30 million granted to CalCEF was distributed by PG&E over five years and derived from shareholders per the terms of the settlement agreement.

CalCEF has a family of entrepreneurial nonprofit organizations focused on the rapid commercialization, deployment and scale up of low-carbon energy technologies. The CalCEF tripartite framework – Ventures, Innovations and Catalyst – identifies market barriers, develops and launches innovative financing solutions to overcome those barriers, and invests in the deployment of those solutions. CalCEF is forging a new model of market, policy and financial innovation to bridge multiple gaps in the development cycle of clean energy technologies.

Since 2005 CalCEF has:

- ◆ Collaborated with industry leaders to bring new financing solutions to the energy efficiency marketplace;
- ◆ Founded the nation's first university center on energy efficiency, at UC Davis;
- ◆ Created the first venture capital impact fund;
- ◆ Helped form the industry's first multi-investor platform for tax equity investment;
- ◆ Launched the industry's first fund to focus on early-stage financing;
- ◆ Collaborated with Lawrence Berkeley National Laboratory to launch CalCharge, aimed at developing and deploying new energy-storage technologies; and,
- ◆ Entered into a contract with the California Energy Commission to administer and run the California Sustainable Energy Entrepreneur Development (CalSEED) initiative.

### ANNUAL REPORT

#### **(1) Any governance structure established for an entity or program.**

CalCEF Ventures is governed by a board of between 3-15 directors under its Incorporation Charter and Bylaws filed in 2004 and the 2013 amended and restated Bylaws that are provided.

*a. Articles of Incorporation:* Articles of Incorporation, 2004 – separately provided as Addendum 1b (available on CD by request).

*b. Bylaws:* Restated Bylaws, 2013 – separately provided as Addendum 2 (available on CD by request).

*c. Settlement Agreement:* [http://docs.cpuc.ca.gov/Published/Final\\_decision/32687.htm](http://docs.cpuc.ca.gov/Published/Final_decision/32687.htm)

*d. Stipulation Agreement:* No stipulation agreement found.



e. *Policies and Procedures: Conflict of Interest Policy, 2009* – separately provide as Addendum 3 (available on CD by request).

**(2) Any staff or employees hired by or for the entity or program and their salaries and expenses.**

CalCEF Ventures employees 12 headcount / 10.5 full-time equivalent staff as of October 2016. This is an increase from the last report as of November 2015, when CalCEF had two full-time staff. A summary of staff salaries and benefits, by year, are provided in **Table 2**. 2015 year-end figures have been corrected and the costs for 2016 are partial and subject to change<sup>2</sup>:

**Table 2**

	Gross Pay	Benefits	Total
2005	\$175,000	\$1,848	\$176,848
2006	\$145,833	\$3,707	\$149,540
2007	\$210,000	\$5,234	\$215,234
2008	\$166,083	\$6,347	\$172,430
2009	\$175,481	\$11,324	\$186,805
2010	\$205,270	\$16,364	\$221,634
2011	\$225,167	\$17,115	\$242,302
2012	\$245,257	\$13,989	\$259,246
2013	\$376,505	\$16,985	\$393,490
2014	\$117,467	\$6,573	\$124,040
2015	\$110,451	\$6,298	\$116,749
2016 (YTD)	\$182,611	\$8,481	\$191,092

**(3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses.**

Staff are shared across the CalCEF family of organizations but accrued for each organization separately. The amount listed above only pertains to the activities of CalCEF Ventures. No state staff is currently or has ever been loaned to this organization. No staff from other internal organizations is on loan.

**(4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the commission entered into the contract.**

<sup>2</sup> The FTE number is as of the end of September, 2016 and does not indicate an average for this year. Most of the additional FTEs joined during the late second quarter of 2016 and the early third quarter of 2016.

CalCEF Ventures' initial funding of \$30 million comes from PG&E shareholders. The funding extended over a five-year period as follows: \$2 million in 2004, \$4 million in 2005, \$6 million in 2006, \$8 million in 2007, and \$10 million in 2008. Minor donations from other entities were made and are detailed on Exhibit 2.1. PG&E's role in CalCEF Ventures was limited to providing the \$30 million in funding and in appointing three of the initial board members. Authority for this funding was given in CPUC decision D03-12-035, upon settlement of PG&E's bankruptcy.

CalCEF Ventures invested in new technologies by entering into partnering contracts with certain for profit venture capital partners, of which CalCEF continues to maintain a position in one of those, namely the CalCEF Clean Energy Angel Fund. CalCEF also holds a direct investment in Thetus, a former portfolio company of one of the venture capital funds – the fund has since been dissolved and ownership interest was transferred to CalCEF Ventures. (A detailed list of investments is provided in Exhibit 2.2).

In 2006 CalCEF Ventures made a grant of \$0.5 million to UC Davis for the development of the Energy Efficiency Center, and in 2007 made a second grant of \$0.5 million per the terms of the grant agreement. In 2008 the sister organization CalCEF Innovation was set up with \$0.5 million to address important gaps in public policy regarding motivation of clean energy technology and business solutions, and to pursue needed policy making and public benefit goals. In 2011 and 2012 CalCEF Ventures co-established two new investment vehicles with operating partners: in 2011 Clean Energy Advantage Partners; and, in 2012 Renewable Energy Trust. CalCEF Ventures maintains ownership interest in these entities to-date. The ownership interest in Renewable Energy Trust has been diluted, as expected, through follow-on funding rounds since the seeding stage. In 2012 CalCEF Ventures continued its support of the UC Davis Energy Efficiency Center and committed to \$0.5 million grant over the next five years. The investment distribution of funding among the partners and grantees is shown in **Table 3** on the next page.

In September 2016, CalCEF Ventures entered into a contract with the California Energy Commission to administer and operate the California Sustainable Energy Entrepreneur Development (CalSEED) initiative. The program is funded through the Electric Program Investment Charge (EPIC). More details on the program goals can be found inside the Request For Proposal documents for this funding opportunity GFO-15-305 available at: <http://www.energy.ca.gov/contracts/RFP-15-305/>

**Table 3**

<b>Year of Investment</b>	<b>Investment Partner</b>	<b>Objective</b>	<b>Total Investment/Grant</b>
2005	DFJ Element Clean Energy Fund, LLP	Support companies solving resource constraint problems	\$8 million
2005	Nth Power Clean Energy Fund, LLP	Build relationships that speed the growth of new energy technologies	\$8.5 million
2006	Vantage Point Venture Partners	New Clean Energy Technology Investment	\$8 million
2006	UC Davis	Energy Efficiency Center	\$1 million
2007	CalCEF Clean Angel Fund	Start-up/seed stage investment fund in the clean energy and related technologies markets.	\$1 million
2008	CalCEF Innovations	Provide funding for public policy and market strategy development.	\$0.5 million
2009	Cleantech Open	Provide funding for entrepreneurship and problem-solving around energy and environmental challenges	\$0.05 million
2010	UC Davis	Energy Efficiency Center	\$0.05 million
2010	Cleantech Open	Provide funding for entrepreneurship and problem-solving around energy and environmental challenges	\$0.05 million
2011	CalCEF Innovations	Provide funding for public policy and market strategy development.	\$0.3 million
2011	Clean Energy Advantage Partners	Tax equity investment fund that deploys capital for renewable energy projects	\$0.4 million
2011	Cleantech Open	Provide funding for entrepreneurship and problem-solving around energy and environmental challenges	\$0.05 million
2011	UC Davis	Energy Efficiency Center	\$0.05 million
2012	CalCEF Innovations	Provide funding for public policy and market strategy development.	\$0.3 million
2012	UC Davis	Energy Efficiency Center	\$0.5 million
2012	Renewable Energy Trust	Solar PV investment fund that deploys capital for renewable energy projects.	\$0.65 million
2013	CalCEF Innovations	Provide funding for public policy and market strategy development.	\$0.3 million

**(5) The public process and oversight governing the entity or program's activities.**

CalCEF Ventures is a non-profit 501(c)(4) corporation not funded through either direct taxation or through utility ratepayers. It has a Board of Directors that provides oversight.

## C. THE CALIFORNIA EMERGING TECHNOLOGY FUND

### BACKGROUND

The California Emerging Technology Fund (CETF) was established as a non-profit corporation pursuant to orders from the California Public Utilities Commission (CPUC) in approving the mergers of SBC-AT&T (formerly known as SBC Communications, Inc. and American Telephone and Telegraph Corp., respectively) and Verizon-MCI (Verizon Communications and MCI Inc.) in 2005. As a condition of approval of the mergers, AT&T and Verizon were required to contribute to CETF a total of \$60 million over 5 years "for the purpose of achieving ubiquitous access to broadband and advanced services in California, particularly in underserved communities, through the use of emerging technologies by 2010." The funds were transferred by both companies by 2010. The funds have not yet been exhausted.

The CPUC stated that CETF should pursue the goals of expanding adoption and usage of broadband technology in addition to promoting ubiquitous access: "We understand that without computers and computer literacy neither availability nor access will ensure use. It is low use that is at the heart of the digital divide. CETF should consider the possibility of public/private partnerships to develop community broadband access points that provide both."

### ANNUAL REPORT

(1) Any governance structure established for an entity or program.

The CPUC orders specified the initial composition and process for constituting the 12-person CETF Board of Directors: four were to be appointed by the CPUC, four were to be appointed by the companies (three by SBC, of which only one could be an employee, and one by Verizon), and these eight were to appoint the remaining four. Initial appointments were made in April 2006 and the Board was fully constituted by the end of June 2006.

Board membership may be found here: <http://cetfund.org/aboutus/board>

a. Articles of Incorporation— <http://cetfund.org/governance/articles-incorporation>

b. Bylaws— <http://cetfund.org/governance/bylaws>

c. Settlement Agreement—The Decisions authorizing the mergers and the creation of CETF are D.05-11-028 and D.05-11-029.

The CPUC's website devoted to the SBC-AT&T merger is here:  
<http://www.cpuc.ca.gov/PUC/hottopics/2Telco/archive/A0502027.htm>

The Decision authorizing the acquisition of MCI by Verizon is here:  
<http://www.cpuc.ca.gov/PUC/hottopics/2Telco/archive/A0504020.htm>

e. Stipulation Agreement—No Stipulation agreement is given for this entity.

f. Policies and Procedures—See Attachment A.



- (2) Any staff or employees hired by or for the entity or program and their salaries and expenses.

Schedule of employees with salaries and expenses.

Year	Gross Pay	Benefits	Total*
<b>July 2008-June 2009</b>	\$ 977,577	\$153,427	\$1,131,004
<b>July 2009-June 2010</b>	\$1,126,019	\$241,568	\$1,367,587
<b>July 2010-June 2011</b>	\$1,247,106	\$267,799	\$1,514,905
<b>July 2011-June 2012</b>	\$1,320,427	\$286,904	\$1,607,331
<b>July 2012-June 2013</b>	\$1,429,589	\$322,854	\$1,752,443
<b>July 2013-June 2014</b>	\$1,426,660	\$301,852	\$1,728,512
<b>July 2014-June 2015</b>	\$1,415,026	\$276,202	\$1,691,228
<b>July 2015-June 2016</b>	\$1,167,255	\$224,465	\$1,391,720

\*These numbers reflect audited financials. Benefits include employer retirement contribution.

- (3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses.

None. There are no state employees at CETF, nor have there ever been any loaned or transferred state employees.

- (4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the commission entered into the contract.

a. Schedule of contracts. There are professional contracts and agreements with grantees. The contracts are listed below. For the grantees Attachment B contains a list of the completed and current grants. CETF 1.0 and 2.0 are completed and CETF 3.0 is active. These numbers are for the contracts in fiscal year July 2015 – June 2016.

Accounting	Total	\$ 74,766
Consortia for Adoption	Total	\$ 25,000
Consortia for Deployment	Total	\$ 25,000
IT Tech Support	Total	\$ 21,695
Legal Counsel	Total	\$ 2,800
Plan Administrators	Total	\$ 5,500
Printing	Total	\$ 16,547
Public Awareness and Education	Total	\$1,321,710
School2Home Consultants	Total	\$147,069

Website Support/Online Grant Services      Total    \$ 12,209

- b. Schedule of contracts and source of funding for contracts. Under the mergers of AT&T/SBC and Verizon/MCI approved by the CPUC, both companies are obligated to fund CETF annually over a five year period for a total of \$60 million. This funding is from the shareholders of each company and not the ratepayers. Both companies have completed their payments. During the 2010 fiscal year CETF was awarded two federal grants from the National Telecommunications Information Agency (NTIA) for a total of \$14.2 million which were completed in FY 2012-2013. The \$60 million in seed capital is expected to be spent by June 2017.

- (5) The public process and oversight governing the entity or program's activities.

CETF is incorporated as a California 501(c)3 non-profit corporation as a public benefit corporation. It has a Board of Directors that provides oversight. CETF was established with shareholder funds from AT&T and Verizon. There were no ratepayer funds in the seed capital that funded CETF.

CETF shares a progress report annually with CPUC Commissioners. Sunne Wright McPeak, CETF President and CEO, met individually with 3 Commissioners during FY14-15. A copy of the Annual Report for 2015-2016 can be found on our website at <http://www.cetfund.org/annualreports>.

The California Broadband Council (CBC) which was established to marshal the state's resources to further the policy of increasing broadband network deployment, and eliminating the Digital Divide by expanding broadband accessibility, literacy, adoption, and usage. While CETF President and CEO, Sunne McPeak, is a member of the CBC, CETF has made presentations on policy issues and grant programs to this group.

CETF publishes an annual report describing the grants to date, the metrics, and outcomes of the investments, and detailed financial information. In addition to mailing printed copies CETF distributes an electronic copy to everyone who signed up on the CETF website. It is also posted on the organization's website at: <http://www.cetfund.org/annualreports>.

The IRS 990s for the past three years are in Attachment C.

CETF hosts a wide range of public forums during the year, including a meeting with its Expert Advisors, Rural and Urban Consortia, and grantees all designed to provide and solicit information about the grants and future directions.

CETF is required by California law to comply with the Non-Profit Integrity Act of 2004. CETF has established an independent Audit Committee which oversees a full financial audit of the financial statements. All the audits are on the CETF website at: <http://www.cetfund.org/aboutus/finances/audit>.

- (6) All sources and amounts of funding and actual and proposed expenditures, both in the two prior fiscal years, and for the proposed fiscal year, including any costs to ratepayers.

- a. Sources and amounts of funding. Under the mergers of AT&T/SBC and Verizon/MCI approved by the CPUC, both companies were obligated to fund CETF annually over a five year period for a total of \$60 million. This funding is from the shareholders of each company and not the ratepayers and is paid in full. During the 2010 fiscal year CETF was awarded two federal grants from the NTIA for a total of \$14.2 million, which were completed in FY 2012-2013.
- b. Actual and proposed expenditures. The audit financial statements are available at the <http://www.cetfund.org/aboutus/finances/audit> for the past 3 fiscal years. The budget (projected expenses) for the current fiscal year is Attachment D. There is an approved budget for School2Home of \$2,750,000 in additional program-grant expenditures.
- c. Costs to ratepayers. None of the costs are charged to ratepayers.

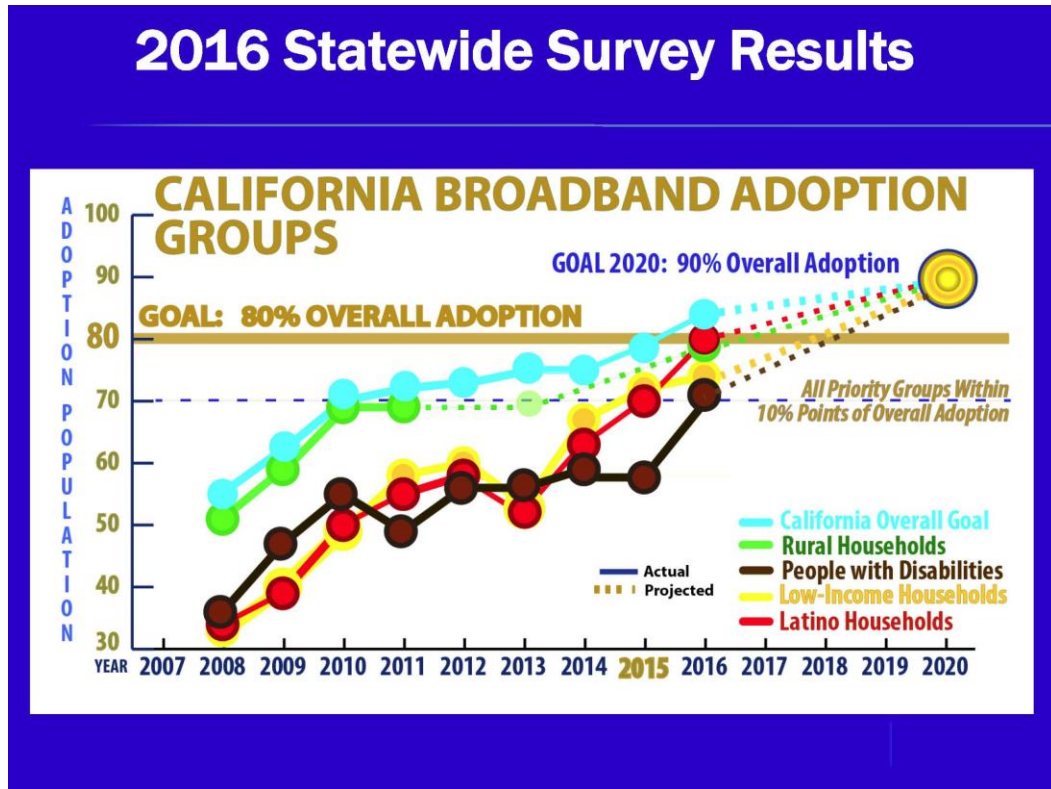
### **Quick Facts**

1. Contributions from AT&T and Verizon were completed as of December 2010, \$60,000,000.
2. Grants approved through June 2016, \$30,112,482.

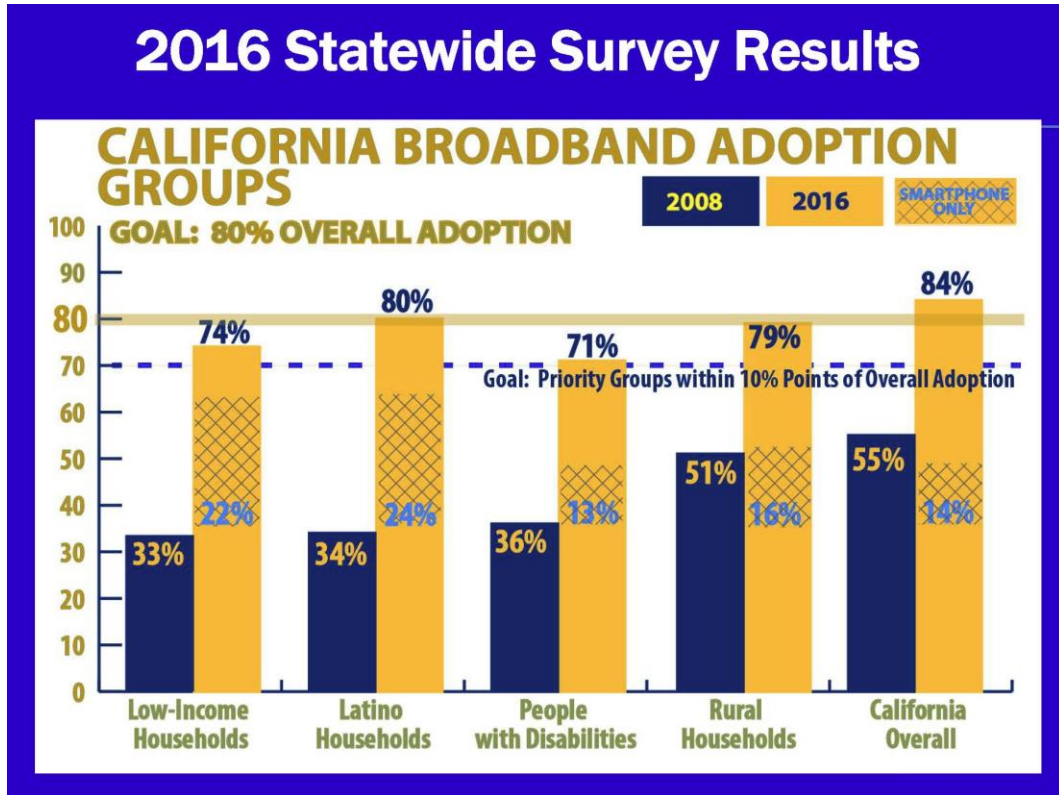
### **Major Highlights and Accomplishments from 2015 - 2016**

1. Managed \$32.6 million in more than 100 Grant Agreements, of which 96 are now complete. Final Reports are posted at: <http://www.cetfund.org/investments/portfolio> and can be accessed by clicking the group's names.
2. Maintained or exceeded goal of 4-fold leveraging (3:1 match) of seed capital.
3. Connected more than 21,000 low-incomes households through grantees work.
4. Led and managed implementation of School2Home in 19 schools in 10 districts with 300 teachers for 6,500 students and their parents.
5. Worked with 5 energy utilities to develop pilots to get their low-income customers online leveraging the success of the model Partnership with the Sacramento Municipal Utility District for sustainable adoption and increasing Digital Literacy among low-income customer base.
6. Assisted affordable housing organizations and housing authorities apply for the funding for publically subsidized multi-family housing in California with the enactment of AB1299. Conducted workshops and webinars for more than 275 attendees.
7. Signed Memorandums of Understanding with Frontier Communications and Charter Communications for tangible public benefits including: an affordable offer in California; funding for digital literacy and adoption programs; infrastructure for 257,000 unserved households; and 125 WiFi hotspots.
8. Launched the Frontier Partnership to achieve 50,000 adoptions and awarded grants to 12 organizations for \$1.5 million.

9. Released 9<sup>th</sup> Annual Statewide Survey on broadband adoption in partnership with Field Research Corporation. The latest survey results from Field Research Corporation are from August 2016. The first chart below shows progress overtime and second show the progress from 2008 to 2016.



# 2016 Statewide Survey Results



Please feel free to contact Sunne Wright McPeak or Susan E. Walters at 415-744-2383 if you have questions or need additional information.



## D. THE CALIFORNIA HUB FOR ENERGY EFFICIENCY FINANCING

### BACKGROUND

The California Hub for Energy Efficiency Financing (CHEEF) was established through California Public Utilities Commission (CPUC) decision D.13-09-044 (the Decision) dated September 20, 2013. The Decision authorizes energy efficiency (EE) financing pilots that leverage ratepayer funds in an effort to attract a greater amount of private capital to the energy efficiency retrofit market by reducing risk to lenders. The CHEEF was established to manage administrative tasks and create a standardized open market for EE financing.

The Decision authorized a total of up to \$75,244,931 (that includes \$9,344,931 of CHEEF Pilot Reserve) of Investors Owned Utilities (IOUs) funds for the pilots for a two year period. Acknowledging that the CHEEF may need to be supported by a master servicer, a trustee bank, a contractor manager, a data manager, and a technical advisor, the decision allocated \$5 million of the budget to cover CHEEF administrative costs and \$2 million to cover CHEEF training and outreach for contractors and financial institutions.<sup>3</sup>

The Decision also selected the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), a state agency associated with the state treasurer's office, to administer the functions of the CHEEF. Because CAEATFA is a state agency, the Decision recognizes that it would be necessary for CAEATFA to obtain legislative budget authority to perform this function. On July 1, 2014, CAEATFA was granted legislative budget authority to act as the CHEEF through December 2015 and the authority was extended on July 1, 2015, for CAEATFA to carry out the services of the CHEEF through June 30, 2017.

CAEATFA entered into a Memorandum of Agreement (MOA) with the CPUC on July 18, 2014, to administer the CHEEF duties. CAEATFA and the CPUC have a close relationship through which the CPUC reviews and approves CAEATFA's funding and work as described in D.13-09-044 and the MOA between the two. D.13-09-044 notes that Commission oversight is "critical to protecting the integrity of ratepayer funds allocated to support [energy efficiency] financing programs." Both the Decision and MOA also direct the CPUC and CAEATFA to coordinate and execute education and outreach for the energy efficiency financing pilot programs.

The Decision included a draft implementation plan for the CHEEF with the following tasks:<sup>4</sup>

1. Issue competitive solicitations for a Master Servicer (MS), and other technical assistance as needed such as for information technology, data management etc.

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<sup>3</sup> See Appendix 3.1 for Finance Pilot budget with CAEATFA Expenditures (September 2014 through September 30, 2016).

<sup>4</sup> A full length Program Implementation Plan for the financing pilots is available through the EEstats website at:[http://eestats.cpuc.ca.gov/EEGA2010Files/SCG/PIP/2013/Clean/8%20SCG%20SW%20Finance%20PIP\\_Clean%20Supplemental%20Filing%20Draft\\_4.23.pdf](http://eestats.cpuc.ca.gov/EEGA2010Files/SCG/PIP/2013/Clean/8%20SCG%20SW%20Finance%20PIP_Clean%20Supplemental%20Filing%20Draft_4.23.pdf)

(The role of the MS is to manage the flow of ratepayer funds and data between the investor owned utilities (IOUs), CHEEF, and financial institutions (FIs)).

2. Create an Information Technology (IT)-driven platform to support the core processes and functions that make on (utility) bill repayment possible and facilitate data collection.
3. Develop procedures for various CHEEF responsibilities such as: approval of forms and protocols for data, transfer between utilities and FIs, and development of lender service agreements.
4. Develop standards for evaluating FI qualifications and approving FIs for pilot participation.
5. Implement Commission-approved protocols for collection of energy and financial data, data sharing, and third party access to aggregated, anonymous data.
6. Develop framework for type and frequency of reporting to CHEEF by IOUs and FIs
7. Ensure quarterly information reports on pilots' progress by CHEEF to the Commission as requested by the Energy Division.
8. Coordinate with existing customer and contractor facing tools such as Energy Upgrade California.
9. Provide a mechanism to make minor, mid-course modifications to the pilot programs as needed to better meet the individual objectives of a particular program.

#### **STATUS AND ACCOMPLISHMENTS FROM CHEEF QUARTERLY REPORT AND PROGRAM STATUS SUMMARY (July1, 2016-September 30, 2016)**

CAEATFA launched the first pilot, Residential Energy Efficiency Loan Assistance Program (REEL), enrolling its first loan in July 2016, and is anticipated to have an initial pilot term through July 15, 2018. To date, CAEATFA has expended approximately \$2,079,536 of \$7 million allocated for CHEEF start-up costs, education, outreach, and training for lenders and contractors.<sup>5</sup> This funding covers CAEATFA's expenditures from September 12, 2014 through September 30, 2016. As of July 1, 2015, CAEATFA received extended legislative budget authority to carry out the services of the CHEEF within the initial existing \$7 million budget through June 30, 2017 (FY 16-17). As the timeframe for development of the IT infrastructure for the OBR pilots is determined, CAEATFA will work with the CPUC to identify the appropriate level of future budget augmentations, and extend CAEATFA's budget authority beyond FY 2016-17.

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<sup>5</sup> Expenditures for 3Q 2016 were under review by the IOUs during the time of this report.

## **ROLES**

### Master Servicer

The master servicer plays a key role in the daily administration of the pilots, accepting lender and loan enrollment applications, and processing on-bill repayment transactions. CAEATFA selected Concord Servicing Corporation (Concord) as the Master Servicer, through a competitive solicitation, and entered into a contract on April 23, 2015. Concord began its on-boarding process and defining its infrastructure and data privacy requirements for the pilots. Concord subsequently began the mapping and development of the REEL infrastructure process while concurrently working with the IOUs to define the various business requirements of the IOU billing systems to enable the flow of funds and data for on-bill repayment. The current contract with Concord is set to expire on December 31, 2016, and is eligible for one additional one-year extension before the contract is required to be re-bid.

### Trustee Bank

The trustee holds the ratepayer funds provided by the IOUs to serve as credit enhancements under the various pilot programs. The Department of General Services (DGS) approved a contract with US Bank on March 11, 2015 to act as the trustee bank. US Bank has worked with CAEATFA to establish holding accounts and reservation accounts for each IOUs. As of September 30, 2015 all of the IOUs have transferred credit enhancement funds into their Holding Accounts. On October 30, 2015, the DGS approved an amendment that extended the US bank contract for one-year. The current contract with US Bank is set to expire on December 31, 2016. However, it can be extended for an additional one-year before it must be re-bid.

### Data Manager

The data manager will receive pilot data from the MS and other energy efficiency finance program administrators to prepare it for public presentation and use. It will also receive project energy usage from the IOUs. The data will be aggregated and anonymized according to the combined standards and regulatory requirements of the IOUs and capital providers. The Request for Proposal (RFP) for this service has been preliminarily drafted but not released; as CAEATFA prioritizes its workload, the RFP will likely be released the first quarter (Q) of 2017. Concurrently, CAEATFA and its agents will continue to collect the appropriate data to ultimately be transmitted to the data manager when it is under contract.

### Contractor Manager

The contractor manager will enroll and manage participating contractors in the REEL Program, coordinate with the Statewide Marketing Implementer on outreach, and conduct quality control oversight of projects not participating in an IOU rebate/incentive program. The RFP for this service is under development and is expected to be released in Q4 2016/Q1 2017 as CAEATFA considers incorporating the commercial pilots into the Contractor Manager's scope of work.

### Agent Bank/secure flow of Funds

As lenders expressed the need for additional safeguard around their funds, as the IOUs remit daily payments designated for participating lenders, an Agent Bank is deemed to be

an appropriate role to accommodate interested lender needs. The RFP for this service was advertised on May 16, 2016. Though potential bidders posed various questions regarding the RFP, CAEATFA did not receive any responses. CAEATFA staffs are currently re-evaluating the structure, consulting with banking professionals, the IOUs, and Concord in exploring multiple options for a secure stream of funds for lenders under the open-market structure of the pilots.

### Technical Advisor

The Technical Advisors provide necessary expertise to assist in CAEATFA's development and implementation of the CHEEF programs. CAEATFA has contracted with Energy Futures Group, Inc. in its research and development for the commercial pilots. In addition, CAEATFA anticipates expanding its Technical Assistance support throughout the development and implementation of the CHEEF programs and administrative infrastructure. CAEATFA continues to rely on the on-going technical support of Harcourt Brown & Carey, under the implementation agreement with the Investor Owner Utilities.

## **ACCOMPLISHMENTS**

### Residential Energy Efficiency Loan (REEL) Assistance Program

The Residential Energy Efficiency Loan (REEL) Assistance Program has launched, enrolling its first loan in July 2016, and is anticipated to have an initial pilot term through July 15, 2018. In addition, as the basic foundations for on-bill functionality are established as described below, the REEL Program regulations will be updated to incorporate the Energy Finance Line Item Charge for customers in PG&E service areas, and may also include other revisions resulting from lessons learned during CAEATFA's experience onboarding lenders and contractors.

### On-Bill Repayment Programs

Several of the Pilot Programs will include On-Bill Repayment (OBR) as a key feature. CAEATFA staff is working with the IOUs and the MS to develop OBR infrastructure. The MS and the IOUs worked independently and in close coordination to build their individual, customized IT systems to accommodate the data exchange and, in the case of the IOUs, modify their billing systems to accept energy efficiency financing charges on their bills. In March 2016, CAEATFA, the MS and the IOUs launched into the planning and testing of the data exchange protocol and the OBR infrastructure. The parties identified several IT risks, conducted gap analysis related to testing plan that was initially developed, and developed several mitigation strategies to ensure a robust testing plan and process. The parties worked together to finalize and complete the testing schedule for the MS-IOU functionality, which included the risk mitigation strategies. The testing plan and testing schedule documents were finalized and accepted in early June 2016.

More information on the CHEEF Pilot Programs, including proposed program guidelines for public comment, is available on CAEATFA's website at <http://www.treasurer.ca.gov/caeatfa/cheef> or at [thecheef.com](http://thecheef.com).

**(1) Any governance structure established for an entity or program**

A specific governance structure was not created for the CHEEF, however, the Decision clarifies that CAEATFA is required to follow public procurement and rulemaking procedures when contracting for CHEEF-managed services and finalizing rules for programs identified in this decision. Specifically, CAEATFA is bound by Chapter 2 (commencing with section 10290) of Part 2 of Division 2 of the Public Contracts Code, and Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. CAEATFA must submit a budget revision request to the Department of Finance and Joint Legislative Budget Committee to approve staff positions to administer the pilots, as well as the ability to utilize ratepayer funds to cover administrative costs. CAEATFA received budget authority most recently on July 1, 2015, for CAEATFA to carry out the services of the CHEEF through June 30, 2017. Additionally, CAEATFA and the CPUC entered into a Memorandum of Agreement on July 18, 2014.

Request from CAEATFA to enter into an MOA (Memorandum of Agreement) with the CPUC: <http://www.treasurer.ca.gov/caeatfa/staff/2013/20131119/4c.pdf>

**(2) Any staff or employees hired by or for the entity or program and their salaries and expenses**

<b>State Personnel Classification -- Limited Term Positions</b>	<b>State Salary + Benefit Range (monthly; includes average benefit)</b>
Staff Services Manager I	\$7210-8497
Associate Governmental Program Associate (AGPA)	\$6499-7657
Associate Governmental Program Associate (AGPA)	\$6499-7657
Associate Governmental Program Associate (AGPA)	\$6499-7657
Associate Governmental Program Associate (AGPA) (vacant–recruiting)	\$6499-7657
Office Technician	\$4708-5414
Office Technician (vacant- recruiting)	\$4708-5414

<b>CHEEF Administrative Expenses</b>		
	<b>FY 2014-2015</b>	<b>FY2015-2016 (through 11/30/2015)</b>
Salary & Benefits	\$334,435	\$218,857
OE&E	\$306,401	\$69,947

**(3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses**

Other CAEATFA staff may assist with intermittent workload. This assistance is not significant and is not quantifiable at this time.

**(4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the commission entered into the contract**

Contract	Amount	Amount Paid (for services through 11/30/2015)	Current Contract Term	Funding Source
Memorandum of Agreement between the CPUC & CAEATFA	\$0	NA	Through 6/30/2017	None
Receivables Contract between the four Investor-Owned Utilities and CAEATFA	\$7,000,000 (reimbursement only)	NA	9/01/2014 – 6/30/2017	Ratepayer Funds
CAEATFA Contract with Master Servicer (Concord Servicing Corporation)	\$1,500,000	\$72,333	1/24/2015 – 12/31/2016	Ratepayer Funds
CAEATFA Contract with Trustee Bank (US Bank)	\$180,000	\$35,000	1/24/2015 – 12/31/2016	Ratepayer Funds

**(5) The public process and oversight governing the entity or program's activities**

CAEATFA is developing the pilots under state laws regarding public processes and procurement. Regulations are established under the oversight of the Office of Administrative Law, which include establishing the appropriate channels for public input and access. In addition, all contracts are publically noticed and competitively bid under the oversight of the Department of General Services.

CAEATFA's budget and position authority is overseen by the Department of Financing and the Legislature on an annual basis.

CAEATFA provides the following reports:

- ◆ Quarterly Reports to the CPUC (as required under the Decision and Contract)
  - ◆ Annual Reports to the State Legislature (Public Resources Code Section 26017)
- Legislatively mandated one-time report due November 1, 2016

## **II. ENTITIES OR PROGRAMS ESTABLISHED BY THE COMMISSION (PUBLIC UTILITIES CODE SECTION 910.4 (b))**

### **A. 21st CENTURY ENERGY SYSTEMS – RESEARCH AND DEVELOPMENT AGREEMENT**

#### **Background**

On December 20, 2012, the California Public Utilities Commission (CPUC) authorized the “21st Century Energy Systems” (CES-21) in D. 12-12-031 (Decision). The Decision authorized development of a five-year “Cooperative Research and Development Agreement “ (CRADA), between Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) (collectively known as the Joint Utilities) and the Lawrence Livermore National Laboratories (LLNL). The program was subsequently modified by 2013’s Budget Trailer Bill (Senate Bill 96). In 2014, the CPUC approved D.14-03-029, which modifies D.12-12-031 to comply with SB 96. Changes included reducing funding from \$152.19 million to \$35 million over the five- year research period, narrowing the scope of the program to focus only on cybersecurity and grid integration, minimizing the governance structure, and enhancing CPUC and Legislative oversight of the program.

On April 25, 2014 the Joint Utilities filed the joint Advice Letter containing their proposed cybersecurity and grid integration research and development projects, revised under the new program requirements. The CPUC conducted a thorough and collaborative review of the proposals, convening a consensus-building session among the parties to discuss the issues raised, and approved Resolution E-4677 at a CPUC meeting on October 2, 2014. Resolution E-4677 approved, with modifications and additional oversight requirements, the Joint Utilities’ proposed cybersecurity and grid integration projects.

#### **Program Overview and 2016 Progress**

The Joint Utilities began implementation in 2015, securing multiple sub-contractors to conduct the work in addition to LLNL. Both projects are underway and making progress towards their goals.

The cybersecurity project, titled Machine-to-Machine Automated Threat Response (MMATR), has \$33 million in funding and seeks to develop automated response capabilities to protect critical California infrastructure against cyber-attacks. Potential breakthroughs are expected in standards for threats, responses, infrastructure, and processes; a secure approach to management, command, and control of the defenses; a standard, open architecture for distributed threat detection and automatic, localized response that provides a basis for commercially viable prototypes; modeling and simulation tools for cyber defense; and recommended responses to threats and threat categories. In 2016, the project moved into the physical demonstration and case testing phase, and multiple outside expert contractors, including from other national labs in addition to LLNL, were engaged to carry out various roles. The project is attempting to develop and deploy the first automated system for detecting and actively responding to cyber-attacks. This capability, especially to the extent that it is effective in coordinating physical infrastructure responses to prevent harm in an attack (for example, by shutting down a substation before it can be harmed or

hacked) would be novel in the electric grid management world and would provide extensive benefits to ratepayers. Energy Division staff was briefed on the project's progress in fall 2016 and will continue to monitor the work.

The grid integration project, titled Flexibility Metrics and Standards, has \$2 million in funding and seeks to improve flexibility metrics and thereby improve long term resource planning for California's grid. In particular, this research project is targeting potential breakthroughs to assess the electric grid's operational flexibility requirements, operating limits of the existing or planned grid to integrate additional amounts of intermittent renewable generation, and additional resources and cost to integrate additional renewable generation.

The Flexibility Metrics project has concluded major portions of its technical research and is nearing its information sharing and coordination phases, and the project managers intend to directly work with stakeholders in the CPUC's main resource planning proceedings to share data and modeling results, run additional tests based on input, and conduct trainings for CPUC staff on the modeling approach. In late 2016, the program administrators informed CPUC staff that the timeline for concluding this project was being expanded to mid-2017; rather than a delay, this is a result of the desire for the project to align with the current Long Term Procurement Plan (LTPP) proceeding and its resource modeling efforts. The project will directly incorporate assumptions and stakeholder input from this proceeding to ensure that their conclusions about grid flexibility and any possible resulting standard metrics will be applicable to the CPUC in the near term. Energy Division staff, including staff in the LTPP proceeding, actively coordinate with and provide input to the project advisory committee, run by PG&E.

For more information contact Melicia Charles [melicia.charles@cpuc.ca.gov](mailto:melicia.charles@cpuc.ca.gov) or 415-355-5502, or Maria Sotero [maria.sotero@cpuc.ca.gov](mailto:maria.sotero@cpuc.ca.gov) or 415-703-2494.



## **B. THE DIABLO CANYON INDEPENDENT SAFETY COMMITTEE**

### **BACKGROUND**

The Diablo Canyon Independent Safety Committee (“DCISC”) was established as a part of a settlement agreement entered into in June 1988 between the Division of Ratepayer Advocates of the California Public Utilities Commission (“CPUC”), the Attorney General for the State of California, and Pacific Gas and Electric Company (“PG&E”) concerning the operation of the two units of PG&E’s Diablo Canyon Nuclear Power Plant (“Diablo Canyon”). The agreement provided that:

“An Independent Safety Committee shall be established consisting of three members, one each appointed by the Governor of the State of California, the Attorney General, and the Chairperson of the California Energy Commission, respectively, serving staggered three-year terms. The Committee shall review Diablo Canyon operations for the purpose of assessing the safety of operations and suggesting any recommendations for safe operations. Neither the Committee nor its members shall have any responsibility or authority for plant operations, and they shall have no authority to direct PG&E personnel. The Committee shall conform in all respects to applicable federal laws, regulations and Nuclear Regulatory Commission (‘NRC’) policies.”

The committee acts as an advisory body and has no independent budget.

On January 25, 2007, the CPUC approved a modified charter for the Safety Committee in D.07-01-028. Section 1.B of the new charter concerns appointments of Committee members. It states that candidates for the Committee membership shall be selected from those applicants responding to an open request for application and requires the CPUC to provide for public comment on the applicants’ qualifications and potential conflicts of interest. Under the modified charter, the President of the CPUC is required to review the applicants’ qualifications, experience, and background, including any conflict of interest, together with any public comments, and propose candidates to the appointing authority with knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues. The CPUC Energy Division is required to prepare and circulate for public comment, and place on the CPUC public agenda a resolution ratifying the CPUC President’s selection of candidates.

### **CURRENT STATUS**

The Governor has reappointed Dr. Per Peterson for the position beginning July 1, 2014. Dr. Peterson’s term will end June 30, 2017. The Chair of the California Energy Commission reappointed Dr. Peter Lam for the position which has a term of July 1, 2015 through June 30, 2018. The California Attorney General has reappointed Dr. Robert Budnitz for the position which has a term of July 1, 2016 through June 30, 2019.

## C. NUCLEAR DECOMMISSIONING TRUSTS

### BACKGROUND

In OII 86 the CPUC conducted an investigation into managing the decommissioning trust funds for California's nuclear power plants. As a result, in D.87-05-062, the CPUC adopted externally managed trusts as the vehicles for accruing decommissioning funds. Two types of funds were established.

1. The *Qualified Trust* funds are contributions that qualify for an income tax deduction under Section 468A of the Internal Revenue Service (IRS) Code.
2. The *Non-qualified Trust* funds are those contributions that do not qualify for an income tax deduction.

Each utility has a Committee made up of 5 members who are responsible for directing and managing their nuclear decommissioning trusts. Two of the Committee members are utility affiliated. The three that are not affiliated with the utility are the CPUC-approved members that serve a term of five years. The Committee appoints trustees and investment managers. On November 25, 1987, Resolutions E-3060, E-3048, and E-3057 approved, respectively, San Diego Gas & Electric's (SDG&E), PG&E's, and Edison's (SCE) Master Trust Agreements.

The utilities employ a stable of investment managers and advisors for their decommissioning trusts.

### Investment Managers

#### **SDG&E:**

- Payden Rygel [Qualified/Fixed income]
- ABGlobal [Qualified/Fixed income] and [Nonqualified/Fixed income]
- Lazard [Qualified/Fixed income]
- Pimco [Qualified/Fixed income]
- Neuberger Berman [Qualified/Fixed income]
- JP Morgan [Qualified/Fixed income]
- State Street Global Advisors [Qualified/U.S. Equity and International] and [Nonqualified/U.S. Equity]

#### **PG&E:**

- Black Rock Financial Management [Qualified trust fixed income]
- NISA Investment Advisors [Qualified trust fixed income]
- State Street Global Advisors [Qualified trust fixed income]
- PanAgora Asset Management [Qualified trust Non-US equities]
- Rhumblin Advisers [Qualified trust U.S. equity]
- Earnest Partners [Qualified trust fixed income]
- Mellon Capital [Qualified trust US equity]

**SCE:**

- Schrodgers [Qualified trust fixed income]
- Black Rock Financial Management [Qualified trust fixed income]
- Alliance Bernstein [Qualified trust fixed income]
- Pan Agora Asset Management [Qualified trust international equity assets]
- Rhumblin Advisers [Qualified trust US equity assets]
- State Street Global Advisors [Qualified/non-qualified US equity assets]
- PIMCO [Qualified/non-qualified fixed income assets]

**Table 5** – The Trust Fund balances as of June 30, 2016:

<b>Utility</b>	<b>Nuclear Plant</b>	<b>Fund Balance</b>
PG&E	HBPP 3	\$ 205. Million
PG&E	DCPP 1	\$1,167. Million
PG&E	DCPP 2	\$1,526. Million
SCE	SONGS 1	\$ 280. Million
SCE	SONGS 2	\$1,219. Million
SCE	SONGS 3	\$1,397. Million
SDG&E	SONGS 1	\$ 157. Million
SDG&E	SONGS 2	\$ 441. Million
SDG&E	SONGS 3	\$ 504. Million
SCE	Palo Verde 1	\$ 348. Million
SCE	Palo Verde 2	\$ 257. Million
SCE	Palo Verde 3	\$ 368. Million

**Trustee**

Mellon Bank N.A. acts as the trustee for SDG&E, PG&E and SCE Decommissioning Trusts by providing custody, record keeping, accounting, taxation, and reporting services on behalf of the trusts.

The Nuclear Regulatory Commission (NRC) has some basic regulations that must be followed regarding decommissioning. These are:

1. Licensees are required to have sufficient funds to decommission the plant. [10 CFR 50.75]. The utilities with nuclear plants file a report every two years with the NRC showing estimated decommissioning costs according to the NRC methodology, and how much money has been set aside for that purpose. The NRC definition of decommissioning is related only to the 'nuclear' portion of the plant. In California, decommissioning also includes restoring the site to its original condition, which includes additional activities and which requires accumulation of more funds.
2. After permanent plant shutdown, certain activities may not be performed that would prevent completion of decommissioning [10 CFR 50.82(6)].

In the 2009 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP), the Commission undertook a comprehensive review of the management and administration of these externally managed nuclear decommissioning trust funds for each of the three major investor-owned electric utilities.

In January 2013, the CPUC issued Decision D.13-01-039, which allows for greater flexibility in trust fund management by allowing for increases in the amount of equity investments and lower-rated higher-yield domestic and foreign bonds to increase the overall yield of the decommissioning trust funds. In the course of the NDCTP the CPUC reviews the trust fund levels and any potential adjustments to amounts paid by ratepayers into the trust funds. The 2012 NDCTP was approved by the CPUC D.14-12-082 on December 18, 2014.

Applications for the 2015 NDCTP were filed by the utilities on March 1, 2016. Currently A.16-03-006 is under review for Diablo Canyon 1 and 2 and Humboldt Bay 3. A.16-03-004 for San Onofre 1, 2, and 3 and Palo Verde will begin in early 2017.

## **D. ELECTRIC PROGRAM INVESTMENT CHARGE (EPIC)**

### **Background**

The Electric Program Investment Charge (EPIC) is an energy innovation funding program established under the authority of the California Public Utilities Commission (CPUC) for the benefit of electricity ratepayers. Organized around three program areas—Applied Research and Development (R&D), Technology Demonstration and Deployment (TD&D), and Market Facilitation—EPIC seeks to drive efficient, coordinated investment in new and emerging energy solutions.

EPIC investments are funded under the authorization of the Commission, as established in Decision (D.) 11-12-035 (the Phase 1 EPIC Decision). D.12-05-037 (the Phase 2 EPIC Decision) requires the Commission to conduct a public proceeding every three years to consider EPIC investment plans for coordinated public interest investment in clean energy technologies and approaches. D.12-05-037 directed the California Energy Commission (CEC), San Diego Gas & Electric Company (SDG&E), Pacific Gas and Electric Company (PG&E), and Southern California Edison Company (SCE), as Administrators of the program, to present their investment plans for the triennial program periods for joint consideration by the Commission.

### **2015-2017 EPIC Investment Plans and 2016 Program Updates**

Pursuant to D.12-05-037, the Administrators filed their investment plans for 2015-2017 EPIC funds. The CPUC approved these investment plans in April 2015 in D.15-04-020, in proceeding A.14-04-034 et al. The applications of the CEC, PG&E, SDG&E, and SCE were approved, with some additional modifications and implementation requirements. The four EPIC Administrators are currently implementing the wide range of research, development, demonstration, deployment, and market facilitation activities. New program requirements in 2015 created an Annual EPIC Symposium to cross-pollinate innovations, and permitted streamlined project proposals to encourage administrator responsiveness to changing market conditions and technology landscapes.

The CEC's 2015-2017 EPIC Investment contains 21 broad "Strategic Objectives," which are in turn made up of "Strategic Initiatives." Across these areas, the CEC will invest in a wide range of activities related to energy efficiency, demand response, renewable and advanced generation, electric vehicles, smart grid, and energy-related environmental research, development, demonstration, and non-technical market facilitation. A total program budget of \$509,603,300 was approved for the 2015-2017 period. The three utilities also each proposed a range of projects in their authorized funding category, Technology Demonstration and Deployment.

In 2016, all four administrators continued active implementation of their 2015-2017 plans, and are also concurrently moving forward with their previously-approved 2012-2014 EPIC plans, which invest in concurrent or parallel research areas. The administrators coordinate closely with each other and stakeholders, under the close oversight of the CPUC. Several stakeholder workshops were held in 2016 with the input and coordination of Energy Division staff, including the second annual EPIC Innovation Symposium, designed to share innovation progress and connect with key stakeholders including the CPUC.

A wide range of funding proposals and projects were initiated in 2016, including those that focus on research gaps in energy efficiency, renewables, and transportation. The CEC also issued a prioritized funding initiative for technology demonstration and deployment of biomass energy solutions that will be targeted to the geographical locations hardest hit by the current tree mortality crisis in the state. The first EPIC projects were concluded in 2016, with topics including grid management and cybersecurity demonstrations. CPUC Energy Division staff continue to work with the CEC and IOUs to identify areas for knowledge transfer between EPIC research projects and current energy policy proceedings.

Additionally, in 2016 the CPUC initiated a public competitive Request for Proposals (RFP) for an independent evaluation of the EPIC program, as required in D.12-05-037. The RFP process resulted in the execution of an evaluation contract, which began in September 2016 and will conclude in September 2017. The evaluation will conduct a comprehensive review of the program, its results, and its processes and provide recommendations for improvement that the CPUC can implement in future funding periods. A particular focus of this evaluation is to identify best practices—both those of the EPIC administrators and in similar research programs across the state and country—that can be expanded in EPIC. Energy Division staff is directing the evaluator closely to ensure it focuses on proactive, feasible ways the program can continue to support true energy innovation and provide benefits to ratepayers while helping achieve policy goals. The findings of this evaluation are expected in Summer 2017, and will be considered in the next EPIC investment plan proceeding which will begin in May 2017.

### **Oversight and Reporting**

Each EPIC administrator submits an annual report to the CPUC in February. The CEC also submits its annual EPIC report directly to the Legislature by March 31. Annual reports provide updates on the status of the investment plans, projects, funding levels, results, intellectual property development, and technological breakthroughs. In late 2016, Energy Division staff was notified by PG&E that several of its projects have resulted in Intellectual Property agreements that will directly generate proceeds to be shared with ratepayers, the first and relatively early signs of EPIC investments translating into direct and quantifiable ratepayer benefits and technology adoption.

For more information contact Melicia Charles [melicia.charles@cpuc.ca.gov](mailto:melicia.charles@cpuc.ca.gov) or 415-355-5502, or Maria Sotero [maria.sotero@cpuc.ca.gov](mailto:maria.sotero@cpuc.ca.gov) or 415-703-2494.

**APPENDICES and  
EXHIBITS**

**Appendix 1.1 Pacific Forest and Watershed Lands Stewardship Council**

2016 Schedule of Employee Compensation through October 31, 2016 for  
Active Employees as of October 31, 2016.

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	148,021	25,780	5,921	179,722
Deputy Executive Director	84,225	10,999	3,369	98,593
Director of Land Conservation	49,682	12,601	373	62,656
Director of Finance	112,339	20,136	4,494	136,969
Other Staff (7 positions)	267,049	70,041	9,069	346,159
<b>Grand Total (11 positions)</b>	<b>661,316</b>	<b>139,557</b>	<b>23,226</b>	<b>824,099</b>

2015 Schedule of Employee Compensation for Active Employees  
Active Employees as of 12/31/2015

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	178,125	28,645	7,078	213,848
Director of Land Conservation	176,000	17,700	7,040	200,740
Director of Finance	130,144	22,988	4,939	158,071
Director of Operations	118,200	32,968	4,728	155,896
Other Staff (9 positions)	454,617	103,152	15,459	573,228
<b>Grand Total (13 positions)</b>	<b>1,057,086</b>	<b>205,453</b>	<b>39,244</b>	<b>1,301,783</b>

2014 Schedule of Employee Compensation for Active Employees  
Active Employees as of 12/31/2014

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	177,820	27,627	7,105	212,592
Director of Land Conservation	178,000	17,349	7,100	202,449
Director of Finance	124,200	22,291	4,731	151,222
Operations and HR Manager	119,325	28,550	4,773	155,737
Senior Project Manager	88,476	29,881	3,539	121,896
Other Staff (9 positions)	426,906	94,497	14,434	532,708
<b>Grand Total (14 positions)</b>	<b>1,114,727</b>	<b>220,195</b>	<b>41,682</b>	<b>1,376,604</b>

2013 Schedule of Employee Compensation for Active Employees  
Active Employees as of 12/31/2013

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	177,820	26,756	7,104	211,680
Director of Land Conservation	175,662	17,219	6,945	199,826
Director of Finance	119,280	21,783	3,205	144,268
Director of Special Projects	118,118	26,123	4,634	148,875
Operations and HR Manager	112,986	28,550	4,519	146,055
Other Staff (9 positions)	468,085	110,605	16,461	595,151
Grand Total (14 positions)	1,171,951	231,036	42,868	1,445,855

2012 Schedule of Employee Compensation for Active Employees  
Active Employees as of 12/31/2012

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	177,498	25,797	7,044	210,339
Director of Land Conservation	164,619	16,973	6,581	188,173
Director of Youth Investment	128,500	26,739	5,120	160,359
Director of Finance (partial year)	9,792	2,436	0	12,227
Director of Special Projects	113,850	22,032	4,554	140,706
Other Staff (17 positions)	941,822	216,654	22,895	1,315,137
Grand Total (22 positions)	1,535,781	310,901	46,193	1,892,875

2011 Schedule of Employee Compensation for Active Employees  
Active Employees as of 12/31/2011

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	175,000	25,032	6,996	207,028
Director of Land Conservation	158,964	16,866	6,355	182,185
General Counsel	153,600	22,556	3,072	179,228
Director of Youth Investment	127,946	24,723	5,093	157,762
Deputy Director of Land Conservation	108,754	18,111	4,348	131,213
Other Staff (16 positions)	866,454	197,552	21,345	1,085,351
Grand Total (21 positions)	1,590,718	304,839	47,210	1,942,767



2010 Schedule of Employee Compensation for Active Employees

Active Employees as of 12/31/2010

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	175,000	22,671	7,000	204,671
Director of Land Conservation	153,513	21,727	3,070	178,310
General Counsel	153,801	17,560	6,152	177,512
Director of Youth Investment	125,033	23,093	5,001	153,127
Director of Finance	100,000	17,557	3,667	121,224
Other Staff (16 positions)	950,451	211,928	23,552	1,185,931
Grand Total (21 positions)	1,657,798	314,535	48,442	2,020,775

2009 Schedule of Employee Compensation for Active

Employees as of 12/31/2009

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	153,125	20,795	3,500	177,420
Director of Land Conservation	146,000	20,834	7,790	174,624
General Counsel	147,700	21,180	2,708	171,588
Director of Youth Investment	120,492	20,066	5,373	145,931
Director of Finance	89,216	18,593	3,569	111,377
Other Staff (15 positions)	684,747	149,190	16,629	850,566
Grand Total (20 positions)	1,341,280	250,658	39,568	1,631,506

2008 Schedule of Employee Compensation for Active

Employees as of 12/31/2008

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	181,111	23,302	7,244	211,657
Director of Land Conservation	139,833	18,923	3,553	162,310
General Counsel	139,941	21,410	0	161,351
Director of Youth Investment	113,328	19,055	4,533	136,916
Finance Manager	84,276	16,231	3,208	103,715
Other Staff (10 positions)	446,494	98,211	9,843	554,548
Grand Total (15 positions)	1,104,983	197,132	28,382	1,330,496

2007 Schedule of Employee Compensation for Active  
Employees as of 12/31/2007

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	172,323	22,242	6,893	201,457
Director of Youth Investment	96,688	17,378	3,868	117,933
Finance Manager	80,732	15,632	3,229	99,593
Other Staff (8 positions)	266,674	60,585	3,961	331,218
Grand Total (11 positions)	616,416	115,837	17,951	750,202

**Appendix 1.2 Pacific Forest and Watershed Lands Stewardship Council**

**SCHEDULE OF PROFESSIONAL  
FEES AS OF 10/31/2016  
PRESENTED BY G/L CATEGORY**

<b>G/L CATEGORY</b>	<b>TOTAL PAID</b>
Legal Fees	21,239
Accounting Fees	36,516
Graphics & Media Fees	3,637
Investment Management Fees	18,926
Professional Services Fees	1,015
Boundary Surveys	205,996
Land Planning Fees	91,984
Land Transfer Costs	27,588
<hr/> Total Consultant Expense	<hr/> 406,901

**Exhibit 2.1**  
**California Clean Energy Fund (CalCEF Ventures)**

**Donors**

2004	PG&E	\$2,000,000
2005	Dewey Ballantine LLP	\$20,000
2005	Cooley Goward	\$10,000
2005	PG&E	\$4,050,000
2006	Dewey Ballantine LLP	\$20,000
2006	PG&E	\$6,000,000
2007	Dewey Ballantine LLP	\$20,000
2007	Nth Power Clean Energy Fund LP	\$20,000
2007	DFJ Alta Terra Clean Energy Fund	\$20,000
2007	PG&E	\$8,000,000
2008	PG&E	\$10,000,000

## Exhibit 2.2

### California Clean Energy Fund (CalCEF Ventures)

CalCEF Ventures investment positions through four venture capital partners.

Status	Investment	Entity
No longer hold position	2005	CoalTek Inc.
No longer hold position	2005	Imperium Renewables
No longer hold position	2005	SpectraSensors Inc.
No longer hold position	2005	SuperProtonic Inc.
No longer hold position	2006	Angstrom Power
No longer hold position	2006	Arxx Corporation
No longer hold position	2006	Blue Egg Inc.
No longer hold position	2006	Bright Source Energy Inc.
No longer hold position	2006	Chemrec AB
No longer hold position	2006	Cobalt Technologies Inc.
No longer hold position	2006	Deeya Energy Inc.
No longer hold position	2006	Fat Spaniel Tech. Inc.
No longer hold position	2006	Imara Corporation
No longer hold position	2006	Mascoma Corp.
No longer hold position	2006	Miartech Inc.
No longer hold position	2006	Microposite Inc.
No longer hold position	2006	Microposite Inc.
No longer hold position	2006	PPT Research Inc.
No longer hold position	2006	Solar Century
No longer hold position	2006	Soliant Energy Inc.
No longer hold position	2006	Synapsense Corp.
No longer hold position	2006	Tesla Motors Inc.
Now holds direct interest	2006	Thetus Corp.
No longer hold position	2007	BioFuelBox Corporation
No longer hold position	2007	BridgeLux
No longer hold position	2007	DynaPump Inc.
No longer hold position	2007	Earthanol Inc.
No longer hold position	2007	Energex
No longer hold position	2007	LumaSense LLC.
No longer hold position	2007	Petra Solar Inc.
No longer hold position	2007	Premium Power Corp.
No longer hold position	2007	TerraPass Inc.
No longer hold position	2007	Think Global AS
No longer hold position	2007	Tioga Energy Inc.
No longer hold position	2007	Wasatch Wind Inc.
No longer hold position	2007	Xerocoat
No longer hold position	2007	Ze-gen
No longer hold position	2008	EdenIQ
No longer hold position	2008	Senergen
No longer hold position	2009	Allopartis Biotechnologies
No longer hold position	2009	Lumetric Lighting, Inc.
No longer hold position	2010	REEL Solar
Maintain position	2011	Alphabet Energy
No longer hold position	2012	Boulder Ionics
Maintain position	2012	Novatorque, Inc.

### Appendix 3.1

Finance Pilot Budget with CAEATFA Expenditures (September 2014 through September 30, 2016)

Item	Allocated	Expended/ Encumbered	Balance
<b>CHEEF Start-Up Cost</b>			
Includes CAEATFA administrative, direct implementation, and contracting costs	\$ 5,000,000	\$ 1,865,462	\$ 3,134,538
<b>Subtotal CHEEF Start-Up Costs</b>	<b>\$ 5,000,000</b>	<b>\$ 1,865,462</b>	<b>\$ 3,134,538</b>
<b>Marketing, Education, Outreach</b>			
Statewide MEO plan	\$ 8,000,000	\$ -	\$ 8,000,000
CAEATFA outreach and training to financial institutions and contractors	\$ 2,000,000	\$ 210,975	\$ 1,789,025
<b>Subtotal Marketing, Education, and Outreach</b>	<b>\$ 10,000,000</b>	<b>\$ 210,975</b>	<b>\$ 9,789,025</b>
<b>Residential pilots</b>			
Single family loan loss reserve	\$ 25,000,000	\$ 3,099	\$ 24,996,901
Energy Financing Line Item Charge (Funding to PG&E)	\$ 1,000,000	\$ -	\$ 1,000,000
Multi-Family	\$ 2,900,000	\$ -	\$ 2,900,000
<b>Subtotal Residential Pilots</b>	<b>\$ 28,900,000</b>	<b>\$ 3,099</b>	<b>\$ 28,896,901</b>
<b>Non-Residential Pilots</b>			
Small business sector OBR with credit enhancement	\$ 14,000,000	\$ -	\$ 14,000,000
Sub-pilot: OBR for lease providers	\$ -	\$ -	\$ -
Sub-pilot: Off-bill for lease providers	\$ -	\$ -	\$ -
Non-residential OBR without credit enhancement	\$ -	\$ -	\$ -
<b>Subtotal Non-Residential Pilots</b>	<b>\$ 14,000,000</b>	<b>\$ -</b>	<b>\$ 14,000,000</b>
<b>Information Technology (IT)</b>			
IT Funding to IOUs <sup>6</sup>	\$ 8,000,000	(TBD)	\$ 8,000,000
<b>Subtotal IT Funding to IOUs</b>	<b>\$ 8,000,000</b>	<b>(TBD)</b>	<b>\$ 8,000,000</b>
<b>CHEEF Pilot Reserve</b>			
CHEEF Pilot Reserve	\$ 7,000,000	\$ -	\$ 7,000,000
Adjustment to reconcile to D.12-11-015 and IOU Compliance ALs	\$ 2,344,931	\$ -	\$ 2,344,931
<b>Subtotal CHEEF Pilot Reserve</b>	<b>\$ 9,344,931</b>	<b>\$ -</b>	<b>\$ 9,344,931</b>
<b>GRAND TOTAL</b>	<b>\$75,244,931</b>	<b>\$ 2,079,536</b>	<b>\$73,165,395</b>

\* Note: Quarterly expenditures are based on good faith estimates due to a lag in invoice submittals.

<sup>6</sup> IT Funding to IOUs reports only the initial allocation, and does not reflect current IOU expenditures.